

CLAIMS

1. A network device management apparatus which has network connection means and manages a network device which is connected to a network, said device having a
5 plurality of functions, comprising:

storage means for storing a network address of at least one network device that does not support any network compatible Plug and Play function, and function information associated with a plurality of functions of
10 the network device; and

response means for, when a location confirmation request of a network compatible Plug and Play device is received via the network connection means, generating and returning a message including identification
15 information which specifies the network device that does not support the network compatible Plug and Play function as a plurality of independent virtual network compatible Plug and Play devices corresponding to the functions indicated by the plurality of pieces of
20 function information stored in said storage means.

2. The apparatus according to claim 1, wherein the function information stored in said storage means includes protocol information required to communicate with a network device to be stored.

25 3. The apparatus according to claim 2, further comprising control means for, when job information addressed to the virtual network compatible Plug and

Play device is received via the network connection means, acquiring an address and protocol information of the corresponding network device from said storage means, converting the job information into the acquired
5 protocol, and transmitting the converted information to the acquired address.

4. The apparatus according to claim 1, wherein the functions indicated by the function information include functions of a plurality of different printer drivers
10 that can generate print data which can be processed by the network device.

5. The apparatus according to claim 1, further comprising:

search means for searching for a network device
15 which does not support any network compatible Plug and Play function;

registration means for registering in said storage means a network address of the network device found by said search means, and information for
20 specifying a protocol used in a communication with the network device found by said search means; and

generation means for generating a message to be returned by said response means in place of the registered network device.

25 6. The apparatus according to claim 5, wherein said search means determines, as a network device group that does not support any network compatible Plug and Play

function, a network device group which remains after excluding network devices detected as a search result of a UPnP network protocol from a network device group detected by a search of an SNMP protocol.

5 7. The apparatus according to any one of claims 1 to 6, wherein the network device is a network printer.

8. The apparatus according to claim 7, wherein, when the network device supports a plurality of printer languages, said response means responds as a logically
10 virtual network compatible Plug and Play printer which is independent for each individual printer language.

9. A method of controlling a network device management apparatus which has network connection means, and storage means for storing a network address of at
15 least one network device that does not support any network compatible Plug and Play function, and protocol information used to communicate with the network device, and manages a network device connected to a network, comprising:

20 generating and returning, when a location confirmation request of a network compatible Plug and Play device is received via the network connection means, a message including identification information which specifies the network device that does not
25 support the network compatible Plug and Play function as a plurality of independent virtual network compatible Plug and Play devices corresponding to the

functions indicated by a plurality of pieces of
function information stored in the storage means.

10. A computer program serving as a network device
management apparatus which has network connection means,
5 and storage means for storing a network address of at
least one network device that does not support any
network compatible Plug and Play function, and protocol
information used to communicate with the network device,
and manages a network device connected to a network,
10 comprising:

generating and returning, when a location
confirmation request of a network compatible Plug and
Play device is received via the network connection
means, a message including identification information
15 which specifies the network device that does not
support the network compatible Plug and Play function
as a plurality of independent virtual network
compatible Plug and Play devices corresponding to the
functions indicated by a plurality of pieces of
20 function information stored in the storage means.

11. A computer-readable storage medium storing a
computer program of claim 10.